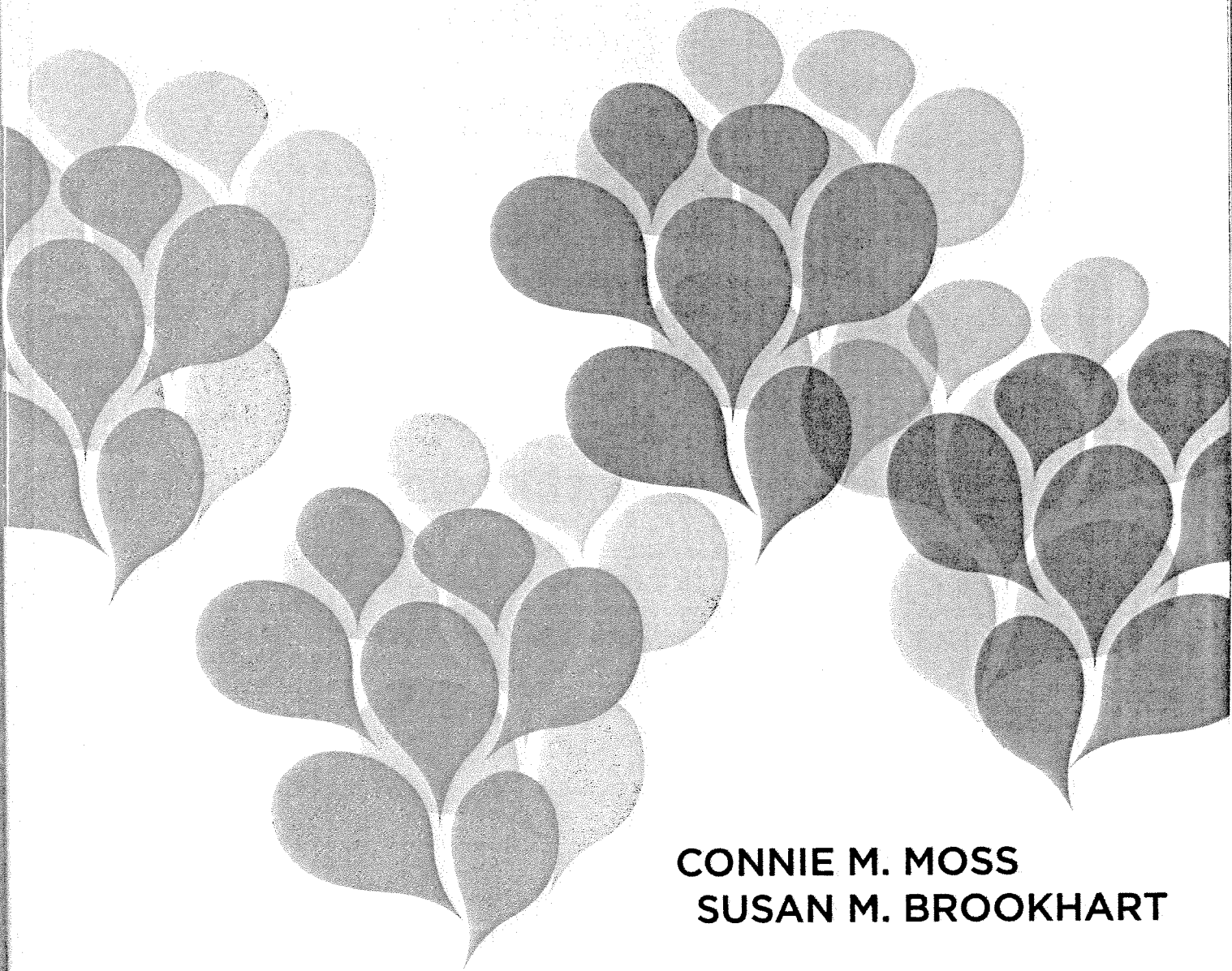


ADVANCING
**FORMative
ASSESSment**
IN EVERY CLASSROOM

a GUIDE FOR INSTRUCTIONAL LEADERS



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1

THE LAY OF THE LAND: Essential Elements of the Formative Assessment Process

When teachers join forces with their students in the formative assessment process, their partnership generates powerful learning outcomes. Teachers become more effective, students become actively engaged, and they both become intentional learners.

We can use the metaphor of a windmill to visualize the formative assessment process and its effects. Just as a windmill intentionally harnesses the power of moving air to generate energy, the formative assessment process helps students intentionally harness the workings of their own minds to generate motivation to learn. Propelled by the formative assessment process, students understand and use learning targets, set their own learning goals, select effective learning strategies, and assess their own learning progress. And as students develop into more confident and competent learners, they become motivated (energized) to learn, increasingly able to persist during demanding tasks and to regulate their own effort and actions when they tackle new learning challenges.

When a windmill whirls into action, its individual blades seem to disappear. The same thing happens to the six elements of the formative assessment process. These interrelated elements are the following:

- Shared learning targets and criteria for success
- Feedback that feeds forward

- Student goal setting
- Student self-assessment
- Strategic teacher questioning
- Student engagement in asking effective questions

As teachers and students actively and intentionally engage in learning, the individual elements unite in a flurry of cognitive activity, working together and depending on each other. Their power comes from their combined effort.

What Is Formative Assessment?

Formative assessment is an active and intentional learning process that partners the teacher and the students to continuously and systematically gather evidence of learning with the express goal of improving student achievement. Intentional learning refers to cognitive processes that have learning as a goal rather than an incidental outcome (Bereiter & Scardamalia, 1989). Teachers and their students actively and intentionally engage in the formative assessment process when they work together to do the following (Brookhart, 2006):

- Focus on learning goals.
- Take stock of where current work is in relation to the goal.
- Take action to move closer to the goal.

The primary purpose of formative assessment is to improve learning, not merely to audit it. It is assessment *for* learning rather than assessment *of* learning. Formative assessment is both an “instructional tool” that teachers and their students “use while learning is occurring” and “an accountability tool to determine if learning has occurred” (National Education Association, 2003, p. 3). In other words, to be “formative,” assessments must inform the decisions that teachers and their students make minute by minute in the classroom. Figure 1.1 compares the characteristics of formative assessment and summative assessment.

Here are some examples of the formative assessment process in the classroom:

- A teacher asks students in his 6th grade social studies class to form pairs to generate three strategic questions that will help them better meet their learning target of describing how erosion has produced physical patterns on the earth’s surface that have affected human activities.

FIGURE 1.1

Characteristics of Formative and Summative Assessment

Formative Assessment (Assessment <i>for</i> Learning)	Summative Assessment (Assessment <i>of</i> Learning)
Purpose: To improve learning and achievement	Purpose: To measure or audit attainment
Carried out while learning is in progress—day to day, minute by minute.	Carried out from time to time to create snapshots of what has happened.
Focused on the learning process and the learning progress.	Focused on the products of learning.
Viewed as an integral part of the teaching-learning process.	Viewed as something separate, an activity performed after the teaching-learning cycle.
<i>Collaborative</i> —Teachers and students know where they are headed, understand the learning needs, and use assessment information as feedback to guide and adapt what they do to meet those needs.	<i>Teacher directed</i> —Teachers assign what the students must do and then evaluate how well they complete the assignment.
<i>Fluid</i> —An ongoing process influenced by student need and teacher feedback.	<i>Rigid</i> —An unchanging measure of what the student achieved.
Teachers and students adopt the role of intentional learners.	Teachers adopt the role of auditors and students assume the role of the audited.
Teachers and students use the evidence they gather to make adjustments for continuous improvement.	Teachers use the results to make final “success or failure” decisions about a relatively fixed set of instructional activities.

- Before a lesson on creating a family budget, a consumer science teacher states the goals for the lesson and asks the students to paraphrase the goals.
- In a high school English class, students use a rubric that they generated as a class to plan their essays, monitor their writing, and edit their drafts in order to meet the criteria for a successful essay.

- In his feedback to a 1st grade student, a teacher shows the student what she did correctly in her attempt to draw the life cycle of a frog. Then the teacher gives the student a strategy to use to improve the accuracy of her drawing before she turns in her final sketch.
- A middle school student decides to use a story map to plan his short story depicting life in the Victorian era. It will help him reach his goal of improving the organization and sequencing of his story.

What Three Questions Guide the Formative Assessment Process?

The formative assessment process aligns what happens in the classroom—day to day and minute by minute—with three central questions:

- Where am I going?
- Where am I now?
- What strategy or strategies can help me get to where I need to go?

These central questions guide everything the teacher does, everything the student does, and everything teachers and their students do together. The questions are deceptively simple, yet to address them students and teachers must become skilled assessors who can gauge the gap between the students' current level of understanding and the shared learning target. Only then can they choose appropriate strategies to close the gap.

This continuous process of setting a learning target, assessing present levels of understanding, and then working strategically to narrow the distance between the two is the essence of formative assessment. Once a learning target is mastered, a new "just right" target is set and the process continues forward. It comes down to the Goldilocks Principle: to generate motivation to learn, the level of challenge and the level of support must be just right. And that means all classroom decisions—those made by the teacher and those made by the students themselves—must be informed by continually gathering evidence of student learning.

The three central questions of the formative assessment process are a great starting point for school leaders as they help teachers recognize and use formative assessment in their classrooms. The questions can guide teachers as they (1) plan

their lessons, (2) monitor their teaching, and (3) help their students become self-regulated learners. Teachers can display the questions in their classrooms and remind their students to think about them before, during, and after each learning experience.

How Does the Formative Assessment Process Affect Student Learning and Achievement?

There is a firm body of evidence that formative assessment is an essential component of classroom work and that its development can raise standards of achievement. We know of no other way of raising standards for which such a strong *prima facie* case can be made.

—Paul Black & Dylan Wiliam,
“Inside the Black Box: Raising Standards Through Classroom Assessment”

The research is clear: formative assessment works. It works because it has a direct effect on the two most important players in the teaching-learning process: the teacher and the student.

In too many classrooms, teachers and their students are flying blind. Teachers cannot point to strong evidence of exactly what their students know and exactly where their students are in relation to daily classroom learning goals. The lack of detailed and current evidence makes it particularly difficult for teachers to provide effective feedback that describes for students the next steps they should take to improve. Students are operating in the dark as well. Without the benefit of knowing how to assess and regulate their own learning, they try to perform well on assignments without knowing exactly where they are headed, what they need to do to get there, and how they will tell when they have arrived.

Effects on Teacher Quality

Teacher quality exerts greater influence on student achievement than any other factor in education—no other factor even comes close (Darling-Hammond, 1999; Hanushek, Kain, O'Brien, & Rivkin, 2005; Thompson & Wiliam, 2007). Formative assessment affects teacher quality because it operates at the core of effective teaching (Black & Wiliam, 1998; Elmore, 2004). Engaged in the

formative assessment process, teachers learn about effective teaching by studying the effectiveness of their own instructional decisions. This practice promotes professional learning that is relevant, authentic, and transformational.

Despite professional development efforts focused on training teachers to use best practices in their classroom, studies clearly show that teachers do not always teach in ways that research supports as best practices for student learning. Rather, teachers teach in ways they *believe* to be best, often ignoring the findings of educational research. The distinction here is critical. Teachers' beliefs not only determine what they do in the classroom but also influence what they count as evidence that learning has occurred. And unless professional learning experiences help teachers examine their working assumptions about how students learn and how good teaching supports learning, they will not make meaningful changes in their teaching practices (Moss, 2002; Schreiber, Moss, & Staab, 2007).

Formative assessment can have a transformational effect on teachers and teaching (see Figure 1.2). In a very real way it flips a switch, shining a bright light on individual teaching decisions so that teachers can see clearly (and perhaps for the first time) the difference between the *intent* and the *effect* of their actions. Armed with this new perspective, teachers can take constructive action in their classrooms. They begin to collect and use strong evidence of exactly what works and exactly what does not work in their classrooms, with their students. And as they critically examine their own knowledge, practices, and working assumptions—during each day, during each lesson, and during each interaction with their students—they become inquiry-minded and keenly aware of exactly where they need to focus their change and improvement efforts in order to raise student achievement.

Effects on Student Learning

The effects of the formative assessment process on students are just as dramatic because it engages students in learning how to learn. Students learn more, learn smarter, and grow into self-aware learners who can tell you exactly what they did to get to exactly where they are. In other words, students become self-regulated learners and data-driven decision makers. They learn to gather evidence about their own learning and to use that information to choose from a growing collection of strategies for success. And students not only learn how to take

FIGURE 1.2

Impact of the Formative Assessment Process on Teachers

Teachers Adopt a Working Assumption That . . .	Teachers Take Constructive Action to . . .
<i>Students learn more effectively when they know and understand the learning goal.</i>	<ul style="list-style-type: none"> • Bring precision to their planning. • Communicate learning goals in student-friendly language. • Unpack the exact criteria students must meet to succeed on each task.
<i>To help each student succeed, I must know precisely where that student is in relation to the learning goal.</i>	<ul style="list-style-type: none"> • Continuously collect evidence of student learning to monitor and adapt their teaching during a lesson.
<i>Effective feedback provides specific suggestions for closing the gap between where students are and where they need to be in relation to the learning goal.</i>	<ul style="list-style-type: none"> • Give feedback that is focused, generative, and descriptive. • Develop a repertoire of feedback strategies.
<i>One of the most important skills I can teach my students is how to regulate their own learning.</i>	<ul style="list-style-type: none"> • Teach their students how to self-assess. • Make rubrics, checklists, guides, and other metacognitive tools an integral part of what students do before, during, and after learning.
<i>Meaningful learning happens between minds, during strategic conversations, and when students become models of success for each other.</i>	<ul style="list-style-type: none"> • Encourage students to become learning resources for each other. • Plan for and ask strategic questions that will produce evidence of student learning.
<i>Motivation isn't something I can give to my students; it is something I must help them develop.</i>	<ul style="list-style-type: none"> • Align appropriate levels of challenge and just-right support. • Intentionally create learning experiences in which students learn what they do well, what they should do more of, and how to focus their efforts to maximize success.

ownership of their learning but also increasingly view themselves as autonomous, confident, and capable.

This combination of learning factors—ownership, autonomy, confidence, and capability—fortifies students with increased levels of resilience. Raising student resilience can derail a dangerous cycle for many students who attribute their failure to perform well on classroom tasks to a lack of academic ability. Judging themselves to be incapable of achieving and powerless to change things, they become discouraged and quit trying (Ames, 1992; Boston, 2002; Vispoel & Austin, 1995). Resilient learners, on the other hand, bounce back from poor performances and adversities. They attribute their failures and their successes on learning tasks to factors *within* their control. They rebound rather than giving up in the face of a challenge. Resilient students believe in their capacity to adapt what they are doing and how they are doing it in order to succeed.

And although formative assessment has a significant effect on learning for all students, it “helps low achievers more than other students and so reduces the range of achievement while raising achievement overall” (Black & Wiliam, 1998). For reasons we mention here and for many more we explore in later chapters, the formative assessment process is a compelling force for increasing student learning and closing the achievement gap.

How Does Formative Assessment Forge a Teacher-Student Learning Partnership?

High-quality formative assessment blurs the artificial barriers between teaching, learning, and assessment to forge a culture of collaborative inquiry and improvement in the classroom. As this learning partnership grows stronger, conversations about learning become the rule of thumb rather than the exception to the rule. Teachers and students work together to gather information about the strengths and weaknesses of their performances in ways that inform *all* learners and *all* learning in the classroom. They do this by talking with one another, planning with one another, comparing evidence of learning, and setting shared learning goals that establish the parameters of what counts as evidence that learning has indeed occurred.

The bottom line is that formative assessment fundamentally changes the quality and quantity of teacher-student interactions. And every day, throughout the day, what happens in the classroom focuses squarely on student achievement.

What Common Misconceptions Might Teachers Hold About Formative Assessment?

Misconceptions are the inevitable result of misunderstanding and often cause teachers to question the formative assessment process. Clearly these misconceptions can dilute the effectiveness of formative assessment and block its consistent use in the classroom. School leaders can take an active role in helping teachers build accurate understandings of what formative assessment is and, perhaps most important, what it *is not*. They can include strategic talking points in their initial and ongoing conversations with teachers about formative assessment. Here we identify common misconceptions and suggest strategic talking points for each.

Misconception #1: Formative assessment is a special kind of test or series of tests that teachers learn to use to find out what their students know. This is probably the most common misconception regarding formative assessment. It is directly related to our sometimes careless custom of using the terms *assessment* and *test* interchangeably. Is it any wonder teachers mistakenly assume that formative assessment is a special kind of test item, test, or series of tests—something that they must administer *to* their students in order to audit learning?

Strategic talking points school leaders can use to address this misconception include the following:

- Formative assessment is not a test item, a test, or a series of tests.
- Formative assessment is an intentional learning process teachers engage in *with* their students to gather information *during* the learning process to improve achievement.
- Formative assessment is a learning partnership that involves teachers and their students taking stock of where they are in relation to their learning goals.

Misconception #2: Formative assessment is a program that teachers adopt and add to what they already do. This misconception can be traced directly to traditional inservice workshop models of professional development. More times than not, teachers are asked to enact a program or technique prescribed by outside experts and presented to them in a one-shot workshop. It stands to reason, then, that teachers often view formative assessment as a program or method they must learn and add to what they already do. This misguided view often leads teachers to wonder how they will find time to “do formative assessment” along with everything else they already “do” in their classrooms. This additive perspective makes it particularly difficult for teachers to recognize formative assessment as a dynamic process that shifts the classroom focus from instruction to learning and represents much more than simply adding a new technique to what currently exists.

Strategic talking points school leaders can use to address this misconception include the following:

- Formative assessment is not a prepackaged program or set of techniques that teachers adopt and enact.
- Formative assessment is a philosophy of teaching and learning in which the purpose of assessing is to inform learning, not merely to audit it.
- The formative assessment process is a fundamental reframing of the work teachers and students do day to day and minute by minute in the classroom.

Misconception #3: Any practice that gathers information for the purpose of improving programs or improving teaching is a part of formative assessment. The final misconception lies at the core of what qualifies a practice as formative assessment. Some educators mistakenly conclude that when teachers use assessment information to redesign or change a lesson, they meet the criteria of formative assessment. For example, a high school history teacher notes a troubling pattern on the final exam for her World War II unit. Half of her students mistakenly identified Germany as the country that suffered the most lasting damage from the war. As a result, she plans to change the way she teaches that

content to her students next year. She intends to spend more time discussing the concept of lasting damage so that her future students can draw conclusions that are more accurate. In this example, the teacher uses information gathered after instruction to plan improved learning experiences for future students. Although the teacher's plan is laudable, it is not an example of formative assessment.

Strategic talking points school leaders can use to address this misconception include the following:

- To be considered part of the formative assessment process, information gathered must be used to inform the learning of *current* students.
- Although the quality of teaching rises as a result of formative assessment, the intended outcome must be to raise the learning and achievement of the students currently in the classroom on the concepts, processes, and skills that formed the basis for the assessment.

What Is the Connection Between Formative Assessment and Motivation?

The term *motivation* comes from the root word *motive*, which means “something that causes a person to act.” Using that root, we can define motivation as something that energizes, directs, and sustains behavior toward a goal. Another way to say this is that motivation is goal-directed behavior combined with the energy and the intention to work toward that goal. In a very real way, motivation gets students learning, points them in the right direction, and keeps them engaged.

Although teachers cannot “give” motivation to their students, they can nurture, foster, and help their students develop more of it. Many educators view motivation as something that comes from external factors such as rewards, incentives, punishments, and warnings—carrots and sticks. This view is not exactly flawed, because one form of motivation, extrinsic motivation, fits nicely into this description. The crux of the matter, though, is that extrinsic motivation applied to the classroom requires that the teacher use rewards (such as stickers, grades, free time, bonus points) and punishments (such as loss of recess, detention, lowering a grade) to control the motivation of students. It follows that students will only be

motivated as long as they are under the control of the teacher. Without the teacher, the motivation disappears. So much for lifelong learning!

In fact, research tells us that extrinsic rewards can actually undermine a student's internal (intrinsic) motivation over time. The most detrimental practices involve giving rewards as a direct function of a student's performance. These rewards follow a common pattern. Students who perform the best get the most rewards, and those who perform less well get fewer or no rewards. For students who cannot meet the requirements, this type of external control chips away at them over time to weaken their motivation to learn, undercut their performance, and leave them demoralized (Deci, Koestner, & Ryan, 1999). Understanding this effect, then, teachers should use extrinsic rewards sparingly and *always* as part of a plan to activate intrinsic motivation so that the external rewards can be gradually decreased and eventually removed.

In contrast, the formative assessment process has no downside. In fact, it is strongly linked to increased intrinsic student motivation. Like the windmill, formative assessment helps students harness the workings of their own minds to continuously generate and strengthen these four important components of motivation to learn:

- Self-efficacy—A learner's belief in his ability to succeed in a particular situation
- Self-regulation—The degree to which a learner is metacognitively, motivationally, and actively participating in her own learning
- Self-assessment—A learner's act of observing, analyzing, and judging his own performance on the basis of criteria and determining how he can improve it
- Self-attribution—A learner's own perceptions or explanations for success or failure that determine the amount of effort she will expend on that activity in the future

Throughout the remaining chapters, we will further unpack what we call the "motivation connection" by examining how the specific elements of the formative assessment process link to the components of intrinsic motivation. Figure 1.3 highlights those links and previews our upcoming examinations of the power of the formative assessment process to generate motivation to learn.

FIGURE 1.3

Links Between Formative Assessment and Intrinsic Motivation

Formative Assessment Elements Help Students Harness the Workings of Their Own Minds in the Following Ways to Generate Components of Motivation to Learn
Shared Learning Targets and Criteria for Success	<ul style="list-style-type: none"> • Directs students and teachers toward specific goals. • Increases initiation for the learning task. • Helps students and teachers monitor learning progress. 	<ul style="list-style-type: none"> • Self-efficacy • Self-assessment • Self-regulation • Self-attribution
Feedback That Feeds Forward	<ul style="list-style-type: none"> • Enhances cognitive processing. • Fosters resiliency and persistence in the face of challenge. • Provides students with specific next-step strategies. 	
Student Goal Setting	<ul style="list-style-type: none"> • Increases active student engagement. • Shifts student focus from performance-directed to goal-directed behavior. • Induces effort, increases persistence, and promotes development of new strategies. 	
Student Self-Assessment	<ul style="list-style-type: none"> • Shifts power from the teacher to the student. • Engages students in actively collecting and interpreting assessment information. • Helps students set more realistic and active goals for continuously raising achievement. 	
Strategic Teacher Questioning	<ul style="list-style-type: none"> • Directs students and teachers toward salient elements of the content, process, or performance. • Scaffolds learners as they move beyond partial, thin, or passive understandings. • Promotes conceptual change. 	
Engagement of Students in Asking Effective Questions	<ul style="list-style-type: none"> • Increases intentional and active student engagement. • Promotes autonomy and independence. • Develops students' perceptions of themselves as producers of knowledge and generators of important lines of inquiry. • Gives students confidence to work through difficulties themselves. 	

How Will I Recognize the Formative Assessment Process When I See It?

Because formative assessment is a systematic and intentional process of gathering evidence of learning, you can observe its effects in the classroom. These effects include what the teacher does, what the students do, what the products and performances look like, and how teachers talk about their students' learning. Figure 1.4 shows some examples of what you can look for inside the classroom. In upcoming chapters we share more "look fors" as we examine the specific elements of the formative assessment process.

How Can I Model the Formative Assessment Process in Conversations with Teachers About Their Own Professional Learning?

The formative assessment process constantly uses evidence to guide teaching and learning. When school leaders enter into collaborative inquiry with teachers, they not only model the formative assessment process, they embody it. Research on professional development tells us that when principals engage in periodic, short, focused, individual conversations with a teacher, they advance professional learning and produce positive change in teacher behavior in ways that far surpass the effects of the traditional "sit and get" workshops (Hall & Hord, 2000). In fact, one of the most strategic actions school leaders can take to bring about increased student achievement is to center their efforts directly on the inner workings of the classroom (Elmore, 2000).

School leaders can use formative discussions with teachers to promote "systematic and intentional inquiry" (Moss, 2000; Moss & McCown, 2007) into their classroom practices. Formative assessment operates at the nexus of what teachers believe to be true about teaching and learning, how those beliefs shape the ways teachers choose to teach, and the effects of instructional decisions on student achievement and motivation to learn. Each element of the formative assessment process helps educators assess what they are doing in their classrooms, why they are doing it, and how their choices are affecting their students. And because the formative assessment process requires teachers to use information

FIGURE 1.4
Recognizing the Formative Assessment Process

Formative Assessment: An active and intentional learning process that partners the teacher and the students to continuously and systematically gather evidence of learning with the express goal of improving student achievement.

Teacher "Look Fors"	Student "Look Fors"
<p>Teachers . . .</p> <ul style="list-style-type: none"> • Share learning goals in developmentally appropriate ways. • Adjust their teaching on the fly to deepen student understanding and clear up misconceptions. • Plan the questions they will ask throughout the lesson to help students focus on salient aspects of important concepts and the criteria for a successful performance. • Teach specific metacognitive strategies to maximize student success. • Provide feedback that is clear, descriptive, and task specific, and show students where they are in relation to the goal and what they should do next to close the gap. • Greet student questions with respect and enthusiasm and respond in thoughtful ways. • Use provocative questions to prompt student reflection on their understanding and performance. • Model self-assessment using the kinds of reasoning skills that students will use to succeed at the task at hand. • Describe student learning along a continuum of progress toward a specific learning goal, noting plans for adjusting instruction and levels of support to promote student growth. 	<p>Students . . .</p> <ul style="list-style-type: none"> • Understand and can explain what they do well and exactly what they should do next. • Recognize when they are learning and when they are not. • Use teacher-made rubrics, checklists, and guides to monitor and adjust the quality of their learning performance. • Can adapt their learning strategies to meet their learning needs. • Set their own learning goals and monitor their progress. • Can assess their own work or performance in relation to the criteria for success. • Set realistic short-term goals for where they want to be, the strategy they will use to get there, and the criteria they will apply to determine they have succeeded. • Ask questions that seek clarity concerning concepts, tasks, and reasoning processes. • Appear confident, engaged, and motivated to learn. • Describe their learning in terms of where they are in relation to the learning goal and what they intend to do next to keep making progress.

about student learning to guide and promote student achievement, it helps their instructional decisions become increasingly intentional and scientifically based. The ability of formative assessment to promote and sustain active teacher inquiry that is both systematic and intentional is exactly why it can have a significant effect on daily classroom practices. Simply put, formative assessment situates powerful professional learning in the heartbeat of the classroom and encourages educators to approach their teaching as “intentional learning” (Moss, 2001).

As schools become places of collaborative inquiry, school leaders can use formative discussions to take a collegial rather than a supervisory perspective on professional learning, focus on each teacher’s unique expertise and professional learning needs, and promote teacher collaboration to improve instruction (Glickman, Gordon, & Ross-Gordon, 1998). School leaders can use well-chosen starter statements that encourage shared inquiry. These starter statements situate the interaction as a formative conversation, center it on professional self-analysis of patterns of practice rather than ramifications of particular incidents, and keep the dialogue free from judgment or evaluation. The statements signal that the teacher is in charge of his or her own professional learning and indicate interest and support. These formative conversations can preview or follow a scheduled classroom visit with a single teacher. In addition, they can serve or launch collaborative inquiry among individuals in a small group or an entire school.

Strategic conversation starters signal that teachers are in charge of their own professional learning and indicate your interest and support. Here are some examples of how to begin a formative conversation with an individual teacher:

- *I know you pride yourself on reaching and teaching all students. I’d like to spend some time thinking with you about ways to collect strong evidence that students are achieving.*
- *I wanted to catch up and talk with you more about strategies you are using to increase student goal setting and self-assessment.*
- *The last time we talked you were concerned that your students were not skilled at regulating their own learning and you planned to use rubrics to help them become more competent in that area. Talk with me a bit about your students’ self-regulation progress.*

Here are some examples of how you might begin a formative conversation with a group:

- *We are acutely aware of the need for our students to improve their reading abilities. Think with me about strategies we can all commit to using and monitoring that will increase the quality of reading for understanding across grade levels and the curriculum. In our conversations, let's be sure that these strategies meet the criteria for formative assessment.*
- *During my classroom walk-throughs this week, I want to focus on the ways we are integrating formative assessment into our daily classroom practice. Think with me about a focus question that would guide the walk-throughs and our lesson planning for the week.*
- *It looks like we are making great progress in our efforts to provide effective feedback to our students. Let's keep that focus in the mix as we discuss how we can continuously and systematically improve the quality of our student feedback by sharing the feedback strategies that work best for each of us and the evidence that we gather to increase our confidence in these strategies.*

Notice that all of the examples open with an invitation to the teachers to think with you. The examples begin a conversation about teaching rather than signal an interrogation. Interrogating can trigger unwanted emotional baggage, derail collaborative inquiry efforts, be interpreted as confrontational, and signal that a grilling is waiting in the wings (Downey, Steffy, English, Frase, & Poston, 2004).

What If?

Given the realities of schools and schooling, there is a good chance teachers are already dealing with a variety of initiatives to improve teaching and learning and may be confused about how formative assessment is distinguished from other forms of assessment or data gathering. *What if you overhear a conversation among a group of teachers about how they feel benchmark assessments are the same as formative assessment?*

The first point to use to address this misconception is that benchmark assessments are interim assessments—they take place periodically, and although

they are important for gauging student learning relative to content standards at a particular point in time, they do not inform teachers and students minute by minute during the learning process. Formative assessment, on the other hand, is a learning process and a learning partnership. Formative assessment provides students and teachers with the information needed to adjust teaching and learning while they are happening. And although benchmark assessments can tell teachers where students are in relation to the benchmark, the formative assessment process helps both teachers *and* students gauge student understanding all along the way.

Second, focus the teachers' attention on how the information from benchmark assessments is used compared with how formative assessment informs learning in real time—day to day and minute by minute in the classroom. Do benchmark assessments inform the learning for *current* students with the current learning target?

And, perhaps most important, help teachers see that benchmark assessments do not involve students in the assessment process. During formative assessment, students are intentionally involved as active self-assessors, goal-setters, and goal-getters. They need to be gathering information about their own learning process and progress. Formative assessment informs learning—it puts students in the driver's seat.

Reflecting on the Essential Elements of the Formative Assessment Process

Formative assessment is an intentional learning process that involves teachers and their students in an active partnership focused on improving achievement and generating motivation to learn. As you reflect on the kind of learning environment formative assessment will help teachers in your school create for and with their students, consider the following questions:

- Do both teachers and students intentionally focus on gathering evidence to inform student learning, or are teachers in charge of assessment efforts focused on auditing learning?
- Does everyone in the classroom share responsibility for learning, or is the teacher responsible for saying what has been learned, who has learned it, and what needs to be learned next?

- Are there classrooms where teachers and their students partner in the formative assessment process day to day and minute by minute? Are there classrooms where teachers are using one or two formative assessment strategies in stand-alone ways? Are there classrooms with little evidence of formative assessment? How can you encourage teachers to work together, share their thinking, and view each other as valuable resources as they individually and collectively work to improve the quality of the formative assessment process in their classrooms?

Summing It Up

The formative assessment process is lightning in a bottle! It costs nothing. You can help teachers put it to work for every age and grade level in every subject during each minute of every school day. This powerful learning process enhances the learning of those who are already excelling, jump-starts and sustains learners who are smoldering with potential, and increases student achievement for all students. What's more, formative assessment raises teacher quality and forges learning partnerships between students and teachers that make a huge difference in what happens every day and every minute in the classroom.

One word of encouragement and caution: Even lightning in a bottle takes time to impact the culture of a school. The formative assessment process, like any other reframing of what happens in classrooms, will take time to grow and develop. Keep in mind that it is a learning process for all learners in the school—the students, the teachers, and the administration. The good news is that when a school commits to creating learning opportunities like the ones we discuss in the remainder of the book, good things begin to happen immediately and multiply quickly. (Chapter 8 explores taking formative assessment schoolwide in greater detail.)

In the chapters that follow, we explore the six elements of the formative assessment process. Each chapter includes specific and practical strategies to help you give teachers both the research base and the how-to information that they will need to implement formative assessment in their own classrooms to increase student achievement and motivation to learn.

